What is claimed is:

1. A polymer dispersion wherein the components of a physical mixture comprising

(i) at least one unsaturated silane of the general formula (I)

$$[H_2C=CX(Y)_n]Si(CH_3)_p(R)_{3-p} \qquad (I),$$

in which X is a hydrogen atom or a methyl group, Y is a divalent group selected from $-CH_2-$ and $-C(O)O-(CH_2)_3-$, n is 0 or 1, R is an alkoxy group selected from methoxy, ethoxy, n-propoxy, isopropoxy, n-butoxy, isobutoxy, and 2-methoxyethoxy, and p is 0 or 1,

and

(ii) at least one organosilane of the general formula (II)

$$R^1Si(CH_3)_q(R^2)_{3-q} \qquad (II),$$

in which R^1 is a linear, branched or cyclic alkyl group having 1 to 18 carbon atoms or is an aryl group or is a polyether group, R^2 is an alkoxy group selected from methoxy, ethoxy, n-propoxy, isopropoxy, n-butoxy, isobutoxy and 2-methoxyethoxy, and q is 0 or 1,

and/or at least one silicic ester of the general formula (III)

$$Si(R^3)_4 \qquad (III),$$

in which groups R^3 are identical or different and R^3 is an alkoxy group selected from methoxy, ethoxy, n-propoxy, isopropoxy, n-butoxy and isobutoxy,

are incorporated into the framework of the polymer.

2. A process for preparing a polymer dispersion as claimed in claim 1, which comprises
   - mixing at least one monomer and components (i) and (ii),
   - dispersing the mixture in surfactant-containing water, and
   - then carrying out the polymerization.

3. A process as claimed in claim 2, wherein from 0.1 to 10% by weight of unsaturated silane (I) is used, based on the total amount of the monomers.

4. A process as claimed in claim 2 or 3, wherein component (i) is used in a weight ratio to component (ii) of from 99.9:0.1 to 0.1:99.9.

5. A process as claimed in any of claims 2 to 4, wherein an unsaturated silane selected from vinyltrimethoxysilane, vinyltriethoxysilane, vinyltri(2-methoxyethoxy)silane, vinylmethyldimethoxysilane, vinylmethyldiethoxysilane, 3-acryloyloxypropyltrimethoxysilane, 3-acryloyloxypropyltriethoxysilane, 3-acryloyloxypropylmethyldimethoxysilane, 3-acryloyloxypropylmethyldiethoxysilane, 3-methacryloyloxypropyl-trimethoxysilane, 3-methacryloyloxypropyltriethoxysilane, 3-methacryloyloxypropylmethyldimethoxysilane, 3-methacryloyloxypropylmethyldiethoxysilane or a mixture of two or more of the aforementioned silanes is used as component (i).

6. A process as claimed in any of claims 2 to 5, wherein an organosilane selected from methyltrimethoxysilane, n-propyltrimethoxysilane, n-propyltriethoxysilane, n-propyltri(2-methoxyethoxy)silane,

isobutyltrimethoxysilane, isobutyltriethoxysilane, n-hexyltrimethoxysilane, n-octyltrimethoxysilane, n-octyltriethoxysilane, n-octyltri(2-methoxyethoxy)silane, isooctyltrimethoxysilane, isooctyltriethoxysilane, n-hexadecyltrimethoxysilane, phenyltrimethoxysilane, phenyltriethoxysilane, tetraethoxysilane, alkyl polyglycol propyltrimethoxysilane or a mixture of two or more of the aforementioned silanes is used as component (ii).

7. A process as claimed in any claims 2 to 6, wherein a precursor stage of a polymer selected from polyacrylates, polymethacrylates, polystyrene acrylates, polyvinyl alcohols, and polyvinyl acetates is used as monomer.

8. A polymer dispersion obtainable as claimed in any of claims 2 to 7.

9. The use of a physical mixture of components (i) and (ii) as claimed in claim 1 for preparing a polymer dispersion.

10. The use of a polymer dispersion as claimed in any of claims 1 to 8 in a concrete primer, in an adhesive or sealant or in an ink or paint.

11. An article prepared using a polymer dispersion as claimed in any of claims 1 to 10.